Cyclones and gales.—February was a stormy month on the North Pacific, though less so than the preceding month. As an evidence of this fact it may be stated that while in January there were at least 11 days on which gales of the highest forces (11–12) occurred, in February only 5 such days have thus far been reported. As in January, the greater number of gale winds experienced by shipping occurred to the westward of the one-hundred-and-eightieth meridian.

The month opened with scattered gales in east and west longitudes. Winds of forces 8–10 occurred between 40°–45° N., 130°–140° W., and of force 11, near 46° N., 168° E., the latter accompanied by a pressure of 28.95 inches.

On the 4th to 6th, gales were fairly general over the western half of the ocean north of the thirtieth parallel. This also was the period of roughest weather for the month, since forces of 11 to 12 were encountered in several localities between 30°–40° N., 150°–170° E., on the 4th and 5th, and forces of 9 and 10 were met over an immense region extending eastward from near the Japanese coast to 170° W. from late on the 3d until late on the 6th. The American steamer *Stanley Dollar* was in the gale field for 70 or more hours between 36° N., 159° E. and 40° N., 175° E., and experienced the heaviest weather of the 4th and 5th. The lowest barometer read on board a ship during this stormey period was 28.64, reported by the British motorship *Silverguava* on the 5th, near 41° N., 164° E., highest wind, force 10, southwest.

From the 6th to 9th a deep midocean storm, minimum pressure 28.70, prevailed between approximately 40° N. and the central Aleutians. Despite its depth, however, it was productive of no gales exceeding 8 in force except far to the south of its center where, between the western Hawaiian Islands and the thirty-fifth parallel, gales of force 9 to 10 were reported on the 6th and 9th.

On February 10 a depression appeared east of northern Japan. It moved northeastward until the 13th, when it was central north of St. Paul Island, Bering Sea. During its passage following the 10th, it caused gales along the northern routes, from the Kuril Islands on the 11th, eastward to about 175° E. on the 13th.

From the 11th to 18th scattered gales occurred over the region between 28°–50° N., 130°–150° W. Those of the 11th, which were experienced in the northwestern part of the area, attained a force of 10.

On the 13th and 17th distinct and separate depressions formed about midway along the California-Hawaii route. The earlier produced no gales except in higher latitudes, where forces of 9 to 10 occurred near 45° N., between 130° and 140° W., on the 14th and 15th. The second depression caused fresh gales near the locality of origin, approximately 30° N., 135° to 145° W.

The 23d and 24th were stormy days at localities along the western half of the northern and central routes. The maximum velocity was force 11, reported by the American steamer *Golden Peak*, near 35° N., 151° E., on the 23d. The lowest pressure of the month, 28.56 inches, was read on board the British steamer *Empress of Asia*, on the same day, near 43° N., 158° E.

Late in the month a LOW of moderate energy lay off the northern coast of the United States. It appears to have caused winds of gale force on only 1 day, the 26th, during which the American steamer *Mojave*, close in off the northern coast of California, experienced winds of force 8 or higher for about 15 hours. The greatest violence attained, force 11, SSE., occurred at about 2 p. m.

Tehuantepecers.—Norther weather in the Gulf of Tehuantepec was more vigorous in February 1935 than in any previous month since January 1928, when there were 11 days with northerly gales. In February there were at least 9 days with gales, distributed as follows: Of force 8 on the 1st, 2d, and 4th; of force 9 on the 17th, 20th, 21st, and 27th; and of force 10 on the 18th and 28th.

Fog.—On the 1st of February, fog blanketed much of the considerable expanse of sea between approximately 43°–51° N., 128°–140° W.; and again on the 3d and 4th was widespread over much of the same area. Fog occurrence diminished toward the westward, but occurred occasionally in several localities. Along the American coast between Vancouver Island and San Francisco, fog was reported on 8 days; between San Diego and Cape San Lucas, on 4 days; and in the Gulf of Tehuantepec, on 2 days.

On the 6th the British steamer *Cruiser* grounded in fog at the entrance to Vancouver Harbor. The passengers were taken ashore, and the ship refloated on the 7th. The British steamer *Princess Alice* grounded on a sandspit near West Point Light in dense fog on the 9th, but was refloated and proceeded toward Victoria on the 10th.

SEA-SURFACE TEMPERATURE SUMMARY FOR THE EAST CENTRAL GULF OF MEXICO, 1912–33

By GILES SLOCUM

The monthly sea-surface temperatures in a representative area in the eastern part of the Gulf of Mexico are given in the accompanying table. The period covered is from January 1912 to December 1933, inclusive. There are 6 months, as noted in the table, for which no observational data are available. The observations of sea-surface temperature for the years 1917, 1918, and 1919 are few in number, and the average temperatures for this period are therefore given only to whole degrees; the mean temperatures for the balance of the 22-year period are given to tenths of a degree.

The area in which these temperature observations were taken embraces two 1°-squares, namely, between 84° W. and 86° W., and between 25° N. and 26° N.

Monthly and annual sea-surface temperatures in the east central Gulf of Mexico, 1912 to 1933, inclusive

Year [1]	Total number of observations for the year	January	February	March	April	May	June	July	August	September	October	November	December	Annual [2]
1912	240	74.2	72.2	75.7	77.6	79.0	80.9	82.9	83.7	81.9	82.5	78.1	77.8	78.9
1913	202	75.9	73.8	74.3	76.3	77.3	80.1	82.0	82.6	81.5	79.6	76.1	74.8	77.9
1914	178	72.7	69.9	71.0	77.1	78.2	81.1	83.0	84.2	82.4	79.6	76.6	75.1	77.6
1915	142	73.2	73.9	72.3	73.6	79.4	83.4	84.9	84.2	83.0	78.7	78.8	76.0	78.4
1916	111	75.1	72.9	71.9	75.1	77.1	80.8	82.2	82.7	82.6	81.2	78.2	74.5	77.9
1917	49	72	73	73	74	75	81	83	[3]	[3]	80	74	73	[4]76.8
1918	12	[3]	73	76	[3]	78	[3]	84	83	82	[3]	79	71	[4]78.1
1919	68	70	76	76	75	78	80	81	84	83	82	80	77	78.6
1920	154	71.1	71.5	74.0	77.0	79.2	79.8	81.9	82.1	83.3	79.0	76.8	74.7	77.6
1921	249	75.9	74.6	74.9	76.4	76.9	81.5	82.8	83.3	83.3	81.0	78.8	75.5	78.7
1922	341	74.9	73.5	74.5	76.2	79.1	81.3	82.8	83.6	82.6	80.9	79.7	76.2	78.8
1923	370	74.4	73.6	75.6	76.1	78.4	80.6	81.8	82.4	83.3	79.6	74.7	75.0	78.0
1924	451	73.6	72.0	72.7	75.1	77.8	83.1	84.3	85.4	83.4	79.9	76.3	75.5	78.3
1925	455	75.1	73.8	73.2	75.6	78.4	82.1	82.9	84.0	83.8	82.4	78.9	75.3	78.8
1926	536	72.6	73.2	73.1	76.9	77.0	82.1	83.5	84.2	83.3	81.5	78.0	77.4	78.6
1927	594	74.2	76.3	75.2	77.0	79.4	82.6	83.8	85.1	84.0	81.8	79.2	75.9	79.5
1928	571	71.9	72.4	72.3	74.8	77.8	81.7	83.8	84.8	83.5	82.0	78.5	75.9	78.3
1929	536	74.2	74.4	75.9	77.7	79.4	80.9	82.1	83.2	82.7	80.0	78.0	75.9	78.7
1930	522	73.9	74.3	74.0	75.9	78.8	79.9	83.0	84.5	83.3	80.7	78.8	73.2	78.4
1931	433	74.3	72.9	73.3	75.0	78.3	80.1	83.8	84.0	83.6	81.9	78.0	78.6	78.6
1932	335	77.4	76.2	74.4	75.9	77.6	80.6	83.9	85.0	83.2	81.9	79.7	77.3	79.4
1933	459	74.5	75.9	75.6	77.7	80.0	81.4	82.5	83.1	83.4	81.5	78.6	76.9	79.3
Number of years' record	------	21	22	22	21	22	21	22	21	21	21	22	22	22
Mean (1912–33) [2]	------	73.9	73.6	74.0	76.0	78.2	81.2	83.0	83.8	83.0	80.9	77.9	75.6	[4]78.4

[1] Values for 1912 to 1919, inclusive, are given to whole degrees, instead of to tenths because of paucity of data.
[2] Computed with monthly values figured to 1 decimal place, and, therefore, not exact means of the figures given here.
[3] No data.
[4] Interpolated values are used for missing months.